REMARKS

Claims 1-53 are pending in the present application. Claims 37-42 are allowed. Claims 25-27 are objected to as being dependent upon a rejected base claim. Claims 1-24, 28 and 43-53 stand rejected. Claims 19, 20, 22 and 23 are have been canceled. Claims 1, 25, 28, 43 and 46 have been amended. Claim 25 has been amended solely to present the claim in independent form. Claim 28 has been amended solely to correct a typographical error and clarify the dependency of the claim.

Amendment or cancellation of the originally filed claims should in no way be construed as an acquiescence, narrowing, or surrender of any subject matter. The amendments are being made not only to point out with particularity and to claim the present invention, but also to expedite prosecution of the present application. Applicant reserves the option to prosecute the originally filed claims further, or similar ones, in the instant or a subsequent patent application.

Claim 28 stands rejected under U.S.C § 112 second paragraph as being indefinite. Claim 28 has been amended to correct a typographical error and now depends on claim 27. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this rejection.

Claims 1, 12-15 and 43 stand rejected under 35 U.S.C. §102(b), as being anticipated by U.S. Patent 4,695,123 to Chang et al. The Examiner asserts that "Chang et al. teaches removing cladding, removing a portion of the core and replacing it with a metal layer." Claims 1 and 43 have been amended to recite optical materials selected from the group of an electro-optic polymer, a thermo-optic polymer, a rare-earth doped material, a material with a high verdet constant, and a material with amplification properties. Applicant asserts that Chang et al. only discloses a metal layer, where the metal layer is formed of "metallic materials such as silver, aluminum, copper or gold." (Chang et al. Col. 8 lines 54-55). Accordingly, Applicant respectfully requests reconsideration and withdrawal of this rejection.

Claims 2-4 and 10-11 stand rejected under 35 U.S.C. §103(a), as being unpatentable over U.S. Patent 4,695,123 to Chang et al in further view of U.S. Patent 6,292,282 to Mossberg et al. Claims 2-4 and 10-11 are dependent on claim 1 and dependent claims thereon. Claim 1 has been amended to recite optical materials selected from the group of a electro-optic polymer, a thermo-

optic polymer, a rare-earth doped material, a material with a high verdet constant, and a material with amplification properties. Chang et al does not teach or suggest any of these optical materials. Chang et al discloses only a metal layer for propagation of surface plasma waves. Only metals can serve as conduits for such surface plasma waves. (Chang et al col. 7 lines 55-59; col. 8 lines 22-36.) Therefore, there would be no reasonable expectation of success using Chang et al alone or further in light of Mossberg et al to arrive at the instant invention.

Further, Mossberg et al teaches only removal of cladding. There is no suggestion or teaching in Mossberg et al of removal of the cladding and at least a portion of core, as recited in amended claim 1. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this rejection.

Claims 5 and 8 stand rejected under 35 U.S.C. §103(a), as being unpatentable over U.S. Patent 4,695,123 to Chang et al in further view of U.S. Patent 4,798,4382 to Moore et al. Claims 5 and 8 are dependent on claim 1 and dependent claims thereon. Claim 1 has been amended to recite optical materials selected from the group of a electro-optic polymer, a thermo-optic polymer, a rare-earth doped material, a material with a high verdet constant, and a material with amplification properties. Chang et al does not teach or suggest these materials. Further, Moore et al teaches only removal of cladding. There is no suggestion or teaching in Moore et al of removal of the cladding and at least a portion of core, as recited in amended claim 1.

Further, neither Moore et al or Chang et al teaches or suggests using an asymmetric fiber as recited in claim 5. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this rejection.

Claims 6, 7 and 9 stand rejected under 35 U.S.C. §103(a), as being unpatentable over U.S. Patent 4,695,123 to Chang et al in further view of U.S. Patent 4,798,4382 to Moore et al. as applied to claims 5 and 8, and further in view of U.S. Patent 6,292,282 to Mossberg et al. Claims 6, 7 and 9 are dependent on claim 1 and dependent claims thereon. Claim 1 has been amended to recite optical materials selected from the group of a electro-optic polymer, a thermo-optic polymer, a rare-earth doped material, a material with a high verdet constant, and a material with amplification properties. Chang et al does not teach or suggest these materials. Further, Moore et al teaches only removal of cladding. There is no suggestion or teaching in Moore et al of removal of the cladding and at least a portion of core, as recited in amended claim 1. Further,

as the Examiner notes, " Chang et al and Moore et al fail to disclose masking a face and then etching to remove cladding nor does Chang et al and Moore et al [teach] etching and excavating as methods to remove optical fiber material." There is no teaching or suggestion in Mossberg to mask a face of an asymmetric fiber, as recited in claim 7. Nor is there any teaching or suggestion in Mossberg et al to remove the core using etching or excavating as recited in claim 6, nor is there any teaching or suggestion in Mossberg et al to use an asymmetric fiber and etch a full circumference of the fiber as recited in claim 7. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this rejection.

Claims 44-53 stand rejected under 35 U.S.C. §103(a), as being unpatentable over U.S. Patent 4,695,123 to Chang et al. Claims 44-53 are dependent on claim 43 and dependent claims thereon. Claim 43 has been amended to recite optical materials selected from the group of a electro-optic polymer, a thermo-optic polymer, a rare-earth doped material, a material with a high verdet constant, and a material with amplification properties. Chang et al does not teach or suggest any of these materials. Chang et al discloses only a metal layer for propagation of surface plasma waves. (Chang et al col. 7 lines 55-59). Because only metals can serve as conduits for such surface plasma waves (Chang et al col. 8 lines 22-36), Applicant further asserts that Chang teaches away from using the claimed materials. There would be no reasonable expectation of success using Chang et al to arrive at a device for use in fiber optic applications comprising an optical material selected from those recited in claim 43. Accordingly, the Applicant respectfully requests withdrawal of the rejections on the claims dependent on claim 43.

Further, with regards to claims 44, 45 and 49, the Examiner states that "Chang et al fails to disclose an activation means for altering optical properties and also fails to disclose an activation means further comprising an electrode. However, Chang et al does disclose a photodetector. A photodetector produces an output electrical signal just like an electrode." Applicant respectfully asserts that a photodetector is a device used to sense incident radiation, as is known to one skilled in the art. A photodetector does not produce an output electrical signal, and can not be used as an activation means for altering optical properties of any material. Accordingly, the Applicant respectfully requests withdrawal of these claim rejections and claims dependent thereon.

Further, with regards to claims 46, 52 and 53, Chang et al fails to teach or suggest using an optical polymer, a diffraction grating or an optical material with a high verdet constant. Accordingly, the Applicant respectfully requests withdrawal of these claim rejections.

Claims 16-24 stand rejected 35 U.S.C. §103(a), as being unpatentable over U.S. Patent 4,695,123 to Chang et al. Claims 19, 20, 22 and 23 have been canceled solely to expedite prosecution. Claims 16, 17, 21 and 24 depend on claim 1 or dependent claims thereon and for at least the reasons presented above, now depend on an allowable claim. With regards to claim 18, the Examiner states that "Chang et al fails to disclose an activation means for altering optical properties and also fails to disclose an activation means further comprising an electrode. However, Chang et al does disclose a photodetector. A photodetector produces an output electrical signal just like an electrode." Applicant respectfully asserts that a photodetector is a device used to sense incident radiation, as is known to one skilled in the art. A photodetector does not produce an output electrical signal, and can not be used as an activation means for altering optical properties of any material. Accordingly, the Applicant respectfully requests withdrawal of these claim rejections.

CONCLUSION

In view of the foregoing remarks, Applicant submits that the pending claims are in condition for allowance. Early and favorable reconsideration is respectfully solicited. The Examiner may address any questions raised by this submission to the undersigned at 617-832-1000. Should a further extension of time be required other than provided for, Applicant hereby petitions for same and request that the extension fee and any other fee required for timely consideration of this application be charged to Deposit Account, **No. 06-1448**.

Respectfully Submitted,

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